CLAIMS

What is claimed is:

1. A method for redirecting connection requests at an operating system kernel level comprising:

receiving, from an application setting up a cluster of servers providing a same service, a socket option call with a list of sockets for informing an operating system kernel that all of the sockets in said list of sockets will provide said same service;

setting up all of said sockets in said list of sockets to reference each other in said operating system kernel; and

responsive to receiving an incoming connection request for a first socket from said list of sockets that is full, redirecting said connection request to a second socket in said list of sockets that is not full, such that said operating system kernel redirects said connection request to said second socket providing said same service as said first socket.

2. The method according to claim 1 for redirecting connection requests further comprising:

responsive to receiving said incoming connection request for said first socket and all of said sockets in said list of sockets are full, dropping said connection request.

3. The method according to claim 1 for redirecting connection requests further comprising:

responsive to receiving said socket option call, binding all of said sockets in said list of sockets to a same port number.

4. The method according to claim 1 for redirecting connection requests wherein each of said sockets in said list of sockets is distributed among said cluster of servers providing said same service.

5. The method according to claim 1 for redirecting connection requests wherein said cluster of servers implements a master-server configuration.

6. The method according to claim 1 for redirecting connection requests further comprising:

binding all of said sockets in said list of sockets to a different internet protocol address; and

responsive to redirecting said incoming connection request from said first socket to said second socket, replacing a requested internet protocol address to which said first socket is bound with a replacement internet protocol address to which said second socket is bound.

7. A system for redirecting connection requests at an operating system kernel level comprising:

means for receiving, from an application server setting up a master-slave configuration, a socket option call with a list of sockets for informing an operating system kernel that all of the sockets in said list of sockets provide a same service;

means for setting up all of said sockets in said list of sockets to reference each other in said operating system kernel;

means, responsive to receiving an incoming connection request for a first socket from said list of sockets that is full, for redirecting said connection request to a second socket in said list of sockets that is not full.

8. The system according to claim 7 for redirecting connection requests further comprising:

means, responsive to receiving said incoming connection request for said first socket and

all of said sockets in said list of sockets are full, for dropping said connection request.

9. The system according to claim 7 for redirecting connection requests further comprising:

means, responsive to receiving said socket option call, for binding all of said sockets in said list of sockets to a same port number.

10. The system according to claim 7 for redirecting connection requests wherein each of said sockets in said list of sockets is distributed among said cluster of servers providing said same service.

11. The system according to claim 7 for redirecting connection requests wherein said cluster of servers implements a master-server configuration.

12. The system according to claim 7 for redirecting connection requests further comprising:

means for binding all of said sockets in said list of sockets to a different internet protocol address; and

means, responsive to redirecting said incoming connection request from said first socket to said second socket, for replacing a requested internet protocol address to which said first

socket is bound with a replacement internet protocol address to which said second socket is bound.

13. A computer program product, residing in a computer readable medium, for redirecting connection requests at an operating system kernel level comprising:

means for enabling receipt, from an application server setting up a master-slave configuration, a socket option call with a list of sockets for informing an operating system kernel that all of the sockets in said list of sockets provide a same service;

means for controlling set-up of all of said sockets in said list of sockets to reference each other in said operating system kernel;

means, responsive to receiving an incoming connection request for a first socket from said list of sockets that is full, for enabling redirection of said connection request to a second socket in said list of sockets that is not full.

14. The computer program product according to claim 13 for redirecting connection requests further comprising:

means, responsive to receiving said incoming connection request for said first socket and

all of said sockets in said list of sockets are full, for enabling said connection request to be dropped.

15. The computer program product according to claim 13 for redirecting connection requests further comprising:

means, responsive to receiving said socket option call, for enabling binding all of said sockets in said list of sockets to a same port number.

16. The computer program product according to claim 13 for redirecting connection requests further comprising:

means for enabling binding all of said sockets in said list of sockets to a different internet protocol address; and

means, responsive to enabling redirection of said incoming connection request from said first socket to said second socket, for controlling replacement of a requested internet protocol address to which said first socket is bound with a replacement internet protocol address to which said second socket is bound.

17. A method for controlling setup of sockets assigned to a cluster of server systems,

comprising:

requesting, by an application, for a kernel to provide a plurality of sockets;

generating a socket call option to bind said plurality of sockets to a particular port number; and

assigning each of said plurality of sockets to one from among a plurality of slave servers spawned by said application to provide a same service, such that said plurality of sockets are setup such that if one socket queue is full when a request is received said request is redirected to another socket providing said same service.

18. A system for controlling setup of sockets assigned to a cluster of server systems, comprising:

means for requesting, by an application, for a kernel to provide a plurality of sockets;

means for generating a socket call option to bind said plurality of sockets to a particular port number; and

means for assigning each of said plurality of sockets to one from among a plurality of

slave servers spawned by said application to provide a same service.

19. A computer program product, residing on a computer readable medium, for controlling setup of sockets assigned to a cluster of server systems, comprising:

means for enabling an application to request that a kernel provide a plurality of sockets;

means for generating a socket call option to bind said plurality of sockets to a particular port number; and

means for controlling assignment of each of said plurality of sockets to one from among a plurality of slave servers spawned by said application to provide a same service.